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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,300	05/17/2001	Klaus Lindemann	P277884	6583

7590 10/20/2006
PILLSBURY WINTHROP LLP
1600 TYSONS BOULEVARD
McLean, VA 22102

EXAMINER

JACKSON, BLANE J

ART UNIT PAPER NUMBER

2618

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/806,300	Applicant(s) LINDEMANN, KLAUS	
	Examiner Blane J. Jackson	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 31 July 2006 have been fully considered but they are not persuasive. The applicant primarily argues that prior art Boltz and Foti do not teach transmitting credit/charging information to a mobile station as a connectionless message in response to the detection of a call termination as recited in the claims. However, Boltz teaches updating the credit/charging information maintained in the network node or a home location register at call completion. Boltz also teaches the RTB subscriber may use the USSD or other MMI message to request the current usage amount and defined limit for display on the mobile station after *call completion* or other appropriate time, column 5, lines 28-37. Boltz teaches the charge information may be requested after call termination or call completion but does not teach the system (automatically) sending the message after call termination. Foti was introduced to teach this claim element: sending the credit/charging information to the mobile station as a connectionless message in response to the detection of the call termination. Foti teaches each real time billing (RTB) subscriber is provided with a readout of the charges for each call *immediately after each call is completed*, column 5, lines 9-21 and the charges may be delivered by short message service to the display of the RTB subscriber's mobile station, column 6, lines 16-20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boltz (U.S. Patent 6,131,024) in view of Foti (US 5,784,442).

As to claims 1 and 8, Boltz teaches a method and arrangement for transmitting credit/charging information to a mobile station, the method/ arrangement including:

Maintaining credit/charging information related to the subscriber of the mobile station in a network node (column 3, line 41 to column 4, line 11, the usage limits are pre-defined by the user and stored in the HLR or intelligent node),

Detecting a call setup request wherein the a call setup request indicates a call chargeable to the subscriber of the mobile station but does not include the credit/charging information (column 4, lines 19-22, the HLR Usage Application retrieves the subscriber information and confirms that the requesting MS has a subscription to define usage limits),

Based on the call setup request, determining the credit/charging information maintained in the network node (column 4, lines 41-47, during call setup, the Usage Monitoring Application within the MSC will manage the call completion in accordance to the limit information),

Establishing the call (column 4, lines 47-58),

Detecting a termination of the call (column 5, lines 15-27, at call completion),

Updating the credit/charging information maintained network node (figures 2 and 3, column 5, lines 15-27, *at call completion*, the Usage Monitoring Application within the MSC updates the current usage amount of time or money spent and stores the data in the VLR and updates the HLR).

Boltz also teaches sending the credit/charging information to the mobile station as a connectionless message during call setup (column 4, lines 41-58) or upon subscriber request by USSD or MMI message, column 5, lines 27-36, but does not teach (automatically) sending the information in response to the detection of the call termination.

Foti teaches a method for providing real time billing information to mobile subscribers where each real time billing (RTB) subscriber is provided with a readout of the charges for each call immediately after each call is completed, figure 2, column 5, lines 9-27 and column 6, lines 20-27). Foti further teaches the message of charges may be delivered by a short message service center and the air interface control channel to the display of the RTB subscriber's mobile telephone, column 6, lines 13-20.

Since Boltz teaches call charge information is automatically provided to the user during call setup, column 4, lines 41-58, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Boltz with the automatic notification approach of Foti at call completion such that the subscriber has the convenience of phone usage or recharge decisions prior to any subsequent call attempt by the subscriber or other designated user.

As to claim 2, Boltz teaches claim 1 further comprising defining an upper limit for an accumulated price of telephone calls, monitoring the accumulated price of telephone calls and allowing a new call only if the accumulated price of telephone calls is less than the upper limits (column 4, lines 41-58, user defined usage limit to be stored in the HLR).

As to claim 3 with respect to claim 1, Foti of Boltz modified teaches the connectionless message is a short message (column 6, lines 16-20).

As to claim 4 with respect to claim 1, Boltz teaches the connectionless message is an Unstructured Supplementary Service Data message (column 4, lines 1-11).

As to claim 5 with respect to claim 1, Foti of Boltz modified teaches releasing the call with sufficient delay to allow sending the connectionless message without paging the mobile station separately after detecting the termination of the call (column 5, lines 16-18 and column 6, lines 16-20, charges are immediately delivered to the subscriber via SMS using a control channel after each call is completed).

As to claims 11 and 13 with respect to claims 1 and 8, Foti of Boltz modified teaches the system is further configured to send to the mobile station a price of a call (column 5, lines 16-20).

As to claims 12 and 14 with respect to claims 1 and 8, Boltz teaches the subscriber defines the limit usage based on charging information, column 3, lines 41-57, but does not specifically teach the system is configured to send to the mobile station a lifetime of available credit.

Hentila teaches subscriber defined instruction located at a service control point of an intelligent network with real time calculations for the call, where the instructions indicate how to perform when certain conditions are met including when predetermined charges are exceeded or certain number of calls allowed with the subscriber notified accordingly, column 6, lines 46-59, column 7, lines 21-37. Hentila specifically teaches the call can be monitored in respect of other conditions indicated in the subscriber record such that at the end of the call, the subscriber's account shows the real time balance, column 8, lines 22-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to identify in the subscriber defined call control system of Boltz the additional subscriber call control instructions of Hentila to report the subscriber's account status regardless of the specific account credit arrangements.

As to claim 15, Foti of Boltz modified teaches the method of claim 1 wherein the credit/charging information is automatically displayed on a display of the mobile station (column 5, lines 16-18, each subscriber is provided with a readout of the charges for

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each call immediately after each call is completed on the digital display on the telephone).

As to claim 16, Boltz teaches the arrangement of claim 8 further comprising:

Means for defining an upper limit for an accumulated price of telephone calls (column 3, lines 41-67, the subscriber defines the usage limits of the mobile station with network storage),

Means for monitoring the accumulated price of telephone calls (figure 2, step 225, column 4, lines 41-58, the MSC will check the current usage amount during call setup), and

Means for allowing a new call only if the accumulated price of telephone calls is less than the upper limit (figures 1 and 2, step 250, column 4, lines 41-58, the call will be allowed to continue as normal if the current usage amount does not exceed the usage limit).

As to claim 17, Foti of Boltz modified teaches the arrangement of claim 8 further comprising means for releasing the call with sufficient delay to allow sending the connectionless message without paging the mobile station separately after detecting the termination of the call (column 5, lines 16-18 and column 6, lines 16-20, charges are immediately delivered to the subscriber via SMS using a control channel after each call is completed).

As to claim 18, Foti of Boltz modified teaches the arrangement of claim 8, further comprising means for automatically displaying the credit/charging information on a display of the mobile station (column 5, lines 16-18, each subscriber is provided with a readout of the charges for each call immediately after each call is completed on the digital display on the telephone).

As to claim 19, Foti of Boltz modified teaches the arrangement of claim 8 further comprising a mobile station which comprises:

Means for receiving credit/charging information related to the mobile station's subscriber in a connectionless message from a network node (column 6, lines 16-20, charges are delivered by a short message service (SMS) message center and the control channel to the display of the subscriber's mobile station), and

Means for automatically displaying the credit/charging information on a display of the mobile station (column 5, lines 9-27, each subscriber is provided with a readout of the charges for each call immediately after each call is completed).

Claims 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boltz (U.S. Patent 6,131,024) and Foti (US 5,784,442) in view of Hentila.

As to claims 7 and 9, with respect to claims 1 and 8, Boltz modified does not teach a system comprising a Service Control Point of an Intelligent Network, the Service Control Point including a Service Logic Program configured to send the credit/charging information in response to detection of the call termination.

Hentila teaches an intelligent network to handle different and evolving call services comprised of a Service Switching Point (SSP) to give the user access to the network and detects service requests of the intelligent network, a Service Control Point (SCP) comprising the programs of the service logic and a service data Point (SDP) that contains the program service data (column 1, lines 39-67). This network under SCP control is used to coordinate and implement call services where the call may be monitored in respect to call accumulation and other condition indicated in the subscriber record (figure 3, column 8, lines 11-29 and column 4, lines 34-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to realize in the basic architecture in the system of Boltz modified application of the intelligent network and prepaid call control system of Hentila for an intelligent network to direct the operational steps to determine, communicate and send credit/charging information to the mobile station.

As to claim 10, Foti of Boltz modified teaches her arrangement of claim 9 further comprising a separate processor configured to format the credit/charging information (figure 2, local Post Processing Unit (23) with computer (24), column 6, lines 9-16).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Foti (US 5,784,442).

As to claim 20, Foti teaches a mobile station comprising:

Means for detecting of a termination of a call chargeable to the mobile station's subscriber (figures 2 and 3, column 7, lines 14-34, a call exemplified where a real time billing (RTB) subscriber places a call to a terminating non RTB subscriber and the RouteReq Inv message identifies the call as a RTB call and alerts the MSC to send the associated TT records to a local post processing unit (23) immediately upon call completion. Call completion denotes the call has ended and detected by the network),

Means for receiving credit/charging information related to the mobile station's subscriber in a connectionless message from a network node (column 6, lines 16-20, the charges are delivered by a short messaged service (SMS) message center and the air interface control channel to the display of the subscriber's mobile station),

Means for automatically displaying the credit/charging information on a display of the mobile station (column 5, lines 9-36, each subscriber is provided with a readout of the charges for each call immediately after each call is completed).

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-

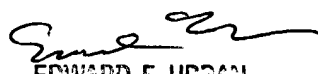
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7890. The examiner can normally be reached on Monday through Friday, 9:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJJ


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